

SILICON RECTIFIERS

FEATURES :

- Low forward voltage drop
- Low leakage current
- High reliability

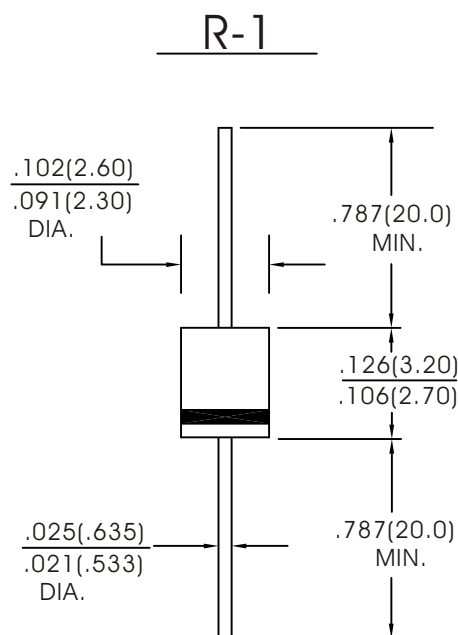
MECHANICAL DATA

Case : Molded plastic
 Epoxy : UL 94V-0 rate flame retardant
 Lead : Axial leads, solderable per MIL-STD-202,
 method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting position : Any

Weight : 0.19 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz resistive or inductive load.

For capacitive load. Derate current by 20%

Characteristic	Symbol	1A1	1A2	1A3	1A4	1A5	1A6	1A7	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current .375"(9.5mm)lead length at $T_a = 25^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25							Amps
Maximum instantaneous forward voltage $I_F = 1.0A$	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_c = 25^\circ\text{C}$ $T_c = 100^\circ\text{C}$	I_R	5.0 50							μA
Typical thermal resistance (NOT1)		15							Pf
Typical junction capacitance (NOT2)	R_{th-JA}	6.0							$^\circ\text{C/W}$
Operating and Storage temperature range	T_J, T_{STG}	-65to+175							$^\circ\text{C}$

NOTES:

(1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.

(2) Thermal resistance from junction to ambient .375"(9.5mm)lead length

RATINGS AND CHARACTERISTIC CURVES 1A1 THRU 1A7

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

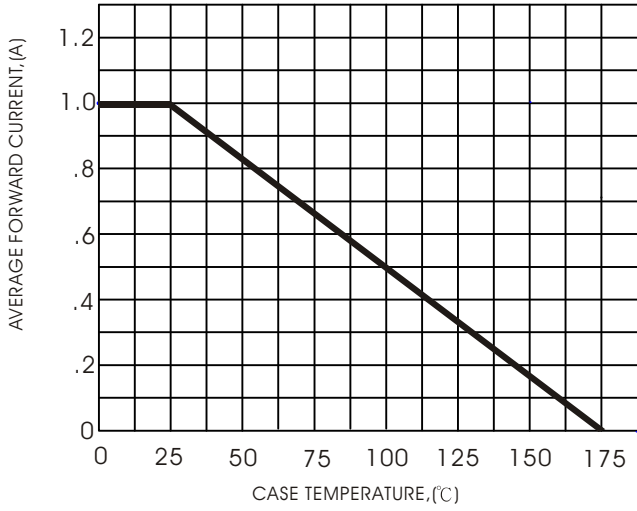


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

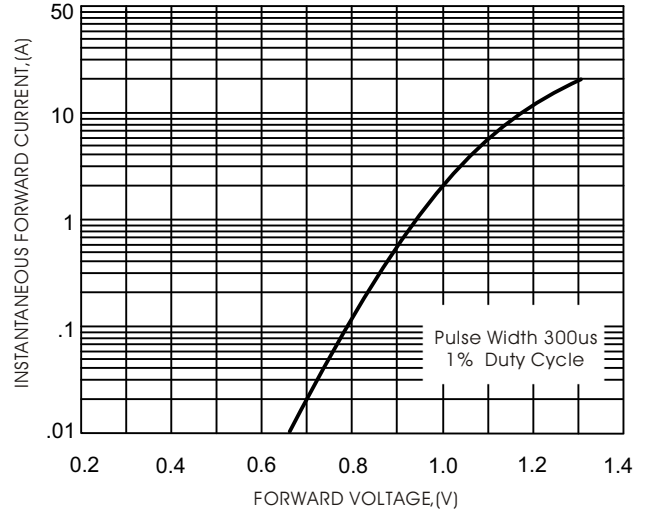


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

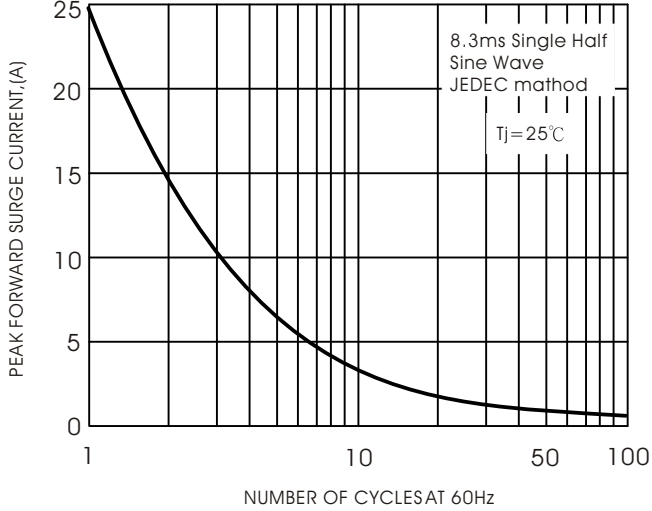


FIG. 3-TYPICAL JUNCTION CAPACITANCE

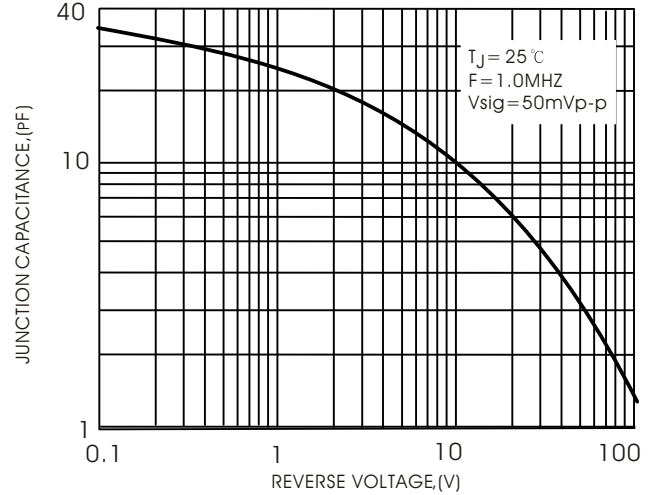


FIG. 5-TYPICAL REVERSE CHARACTERISTICS

